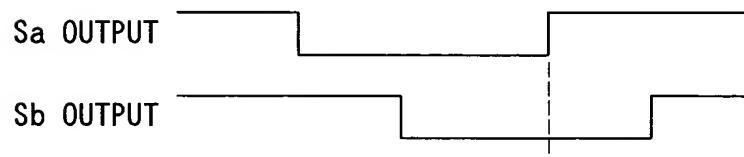
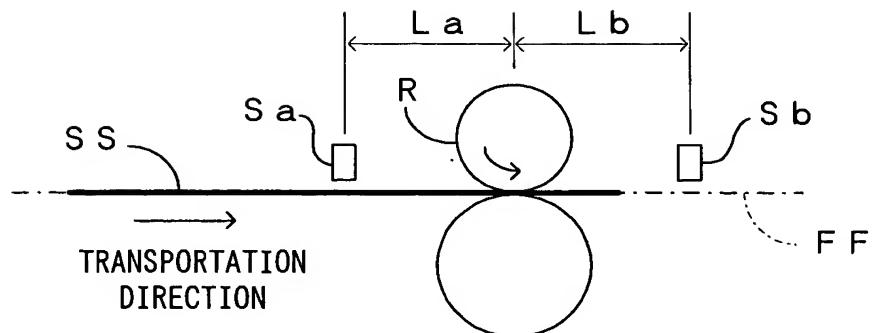


F I G . 1 A



F I G . 1 B

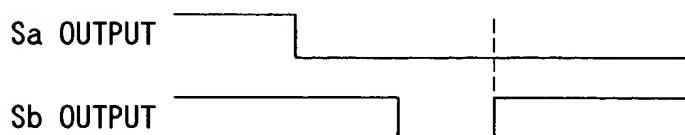
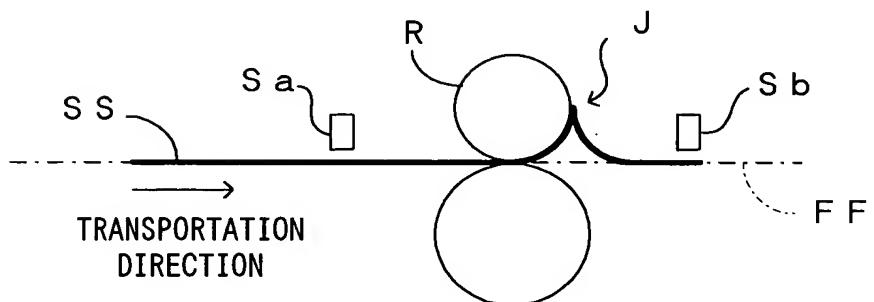


FIG. 2

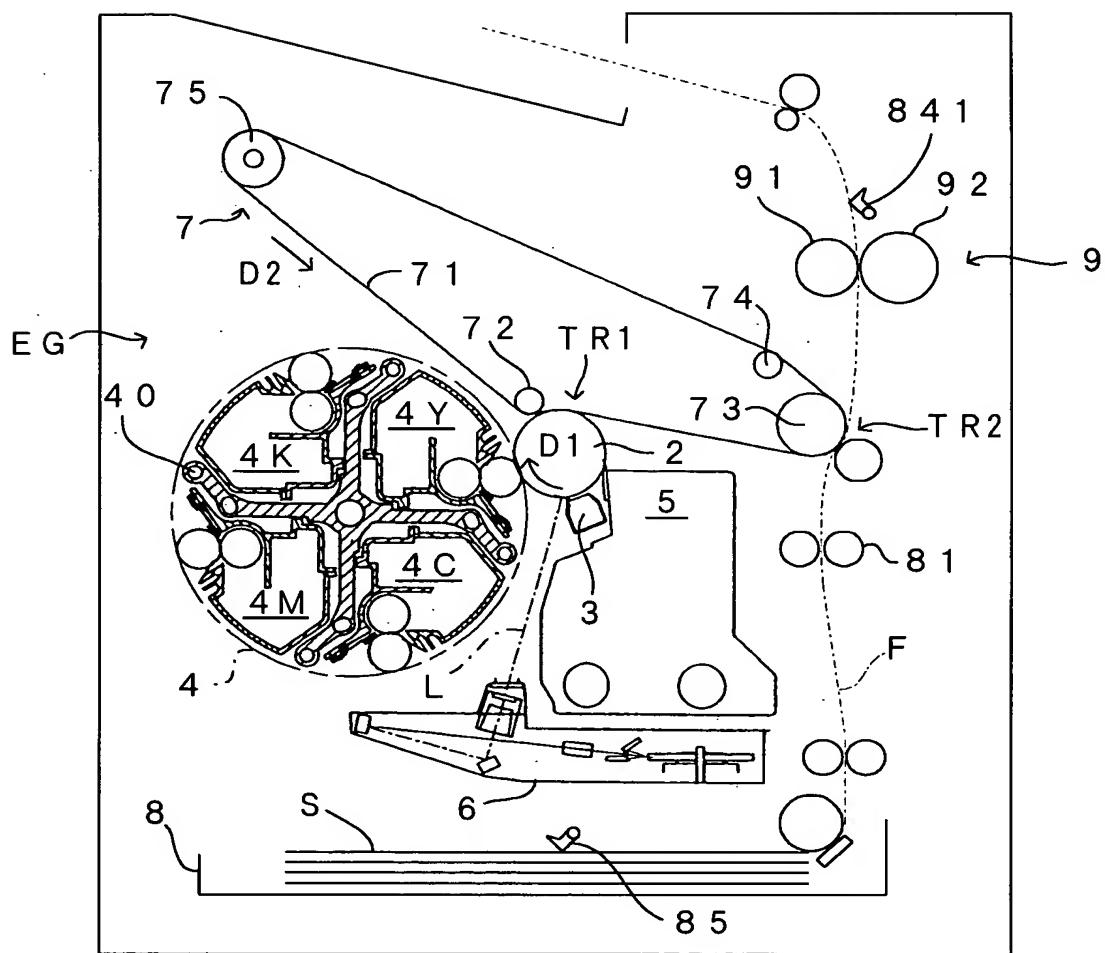


FIG. 3

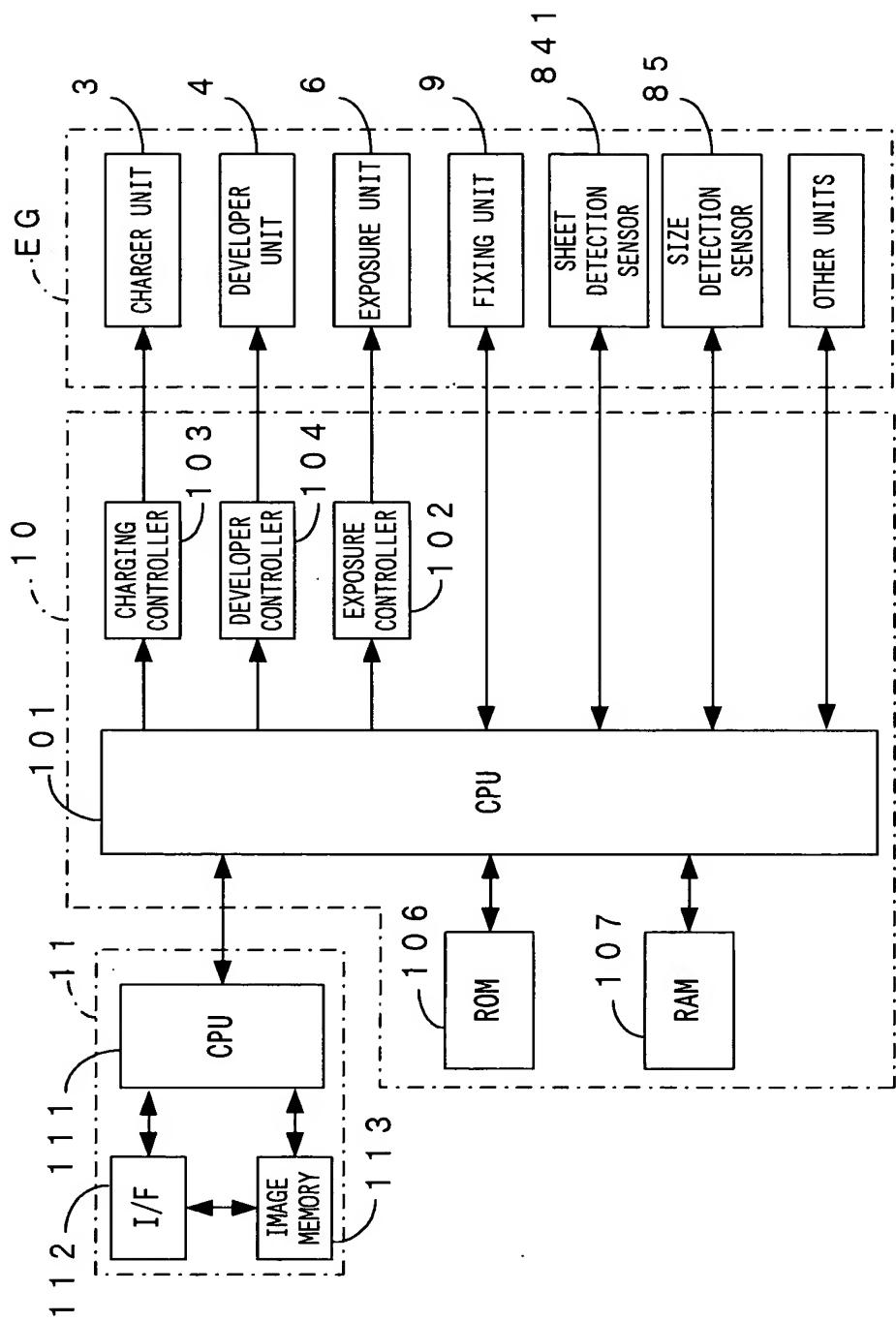


FIG. 4 A

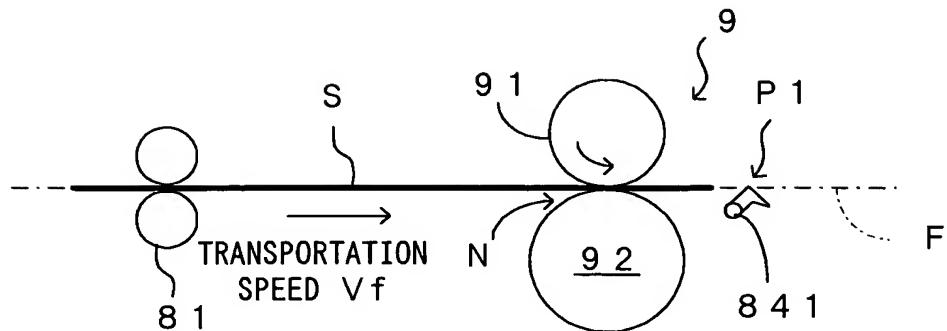
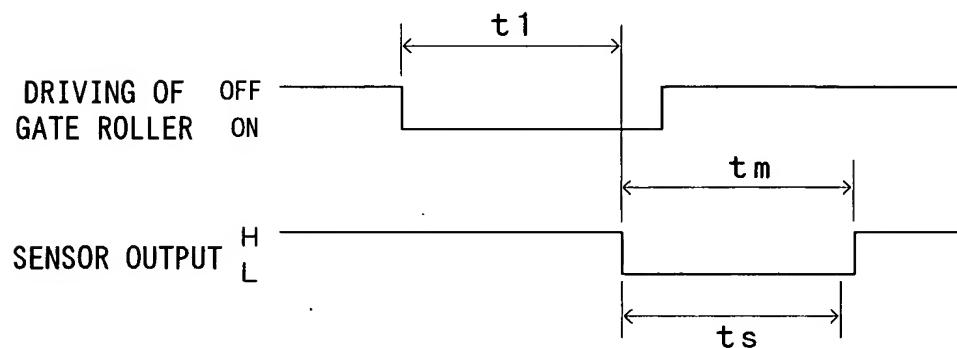


FIG. 4 B



F I G. 5

SHEET SIZE	SHEET LENGTH L_s [mm]	REFERENCE TIME t_s [sec]
A3	420	3.780
A4	297	2.673
B4	364	3.276
B5	257	2.313

$$t_s = L_s / V_f \times 0.9$$

V_f (TRANSPORTATION SPEED) = 100 mm/sec

FIG. 6 A

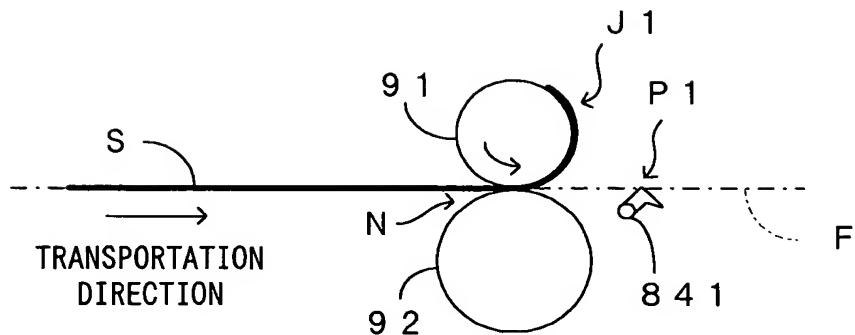


FIG. 6 B

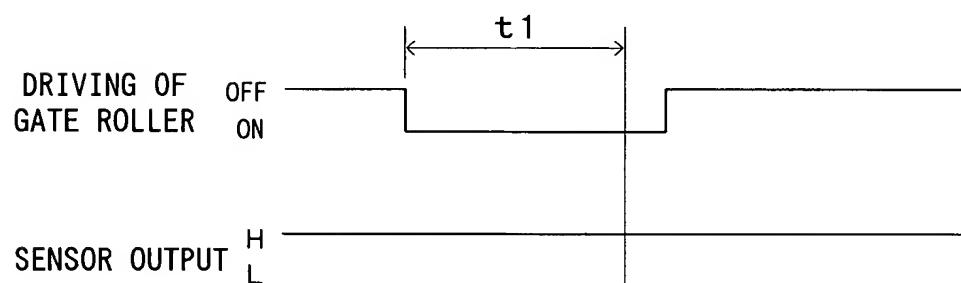
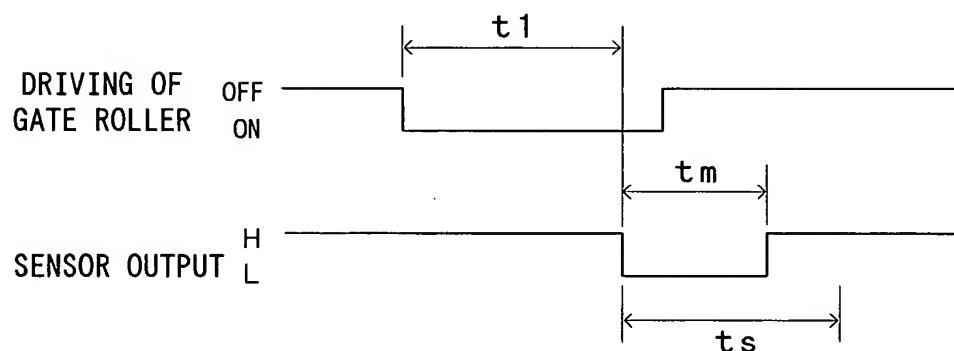
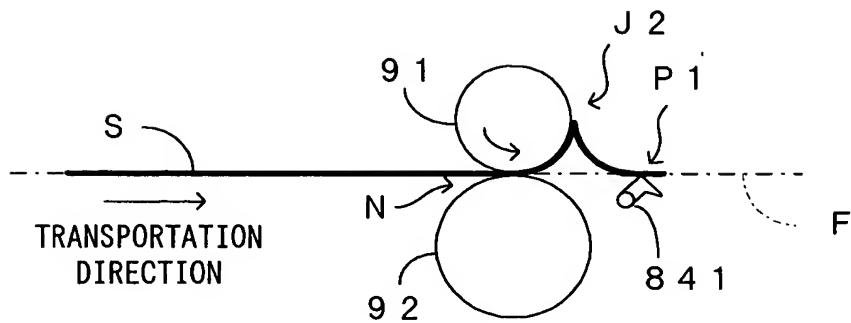


FIG. 7



F I G . 8

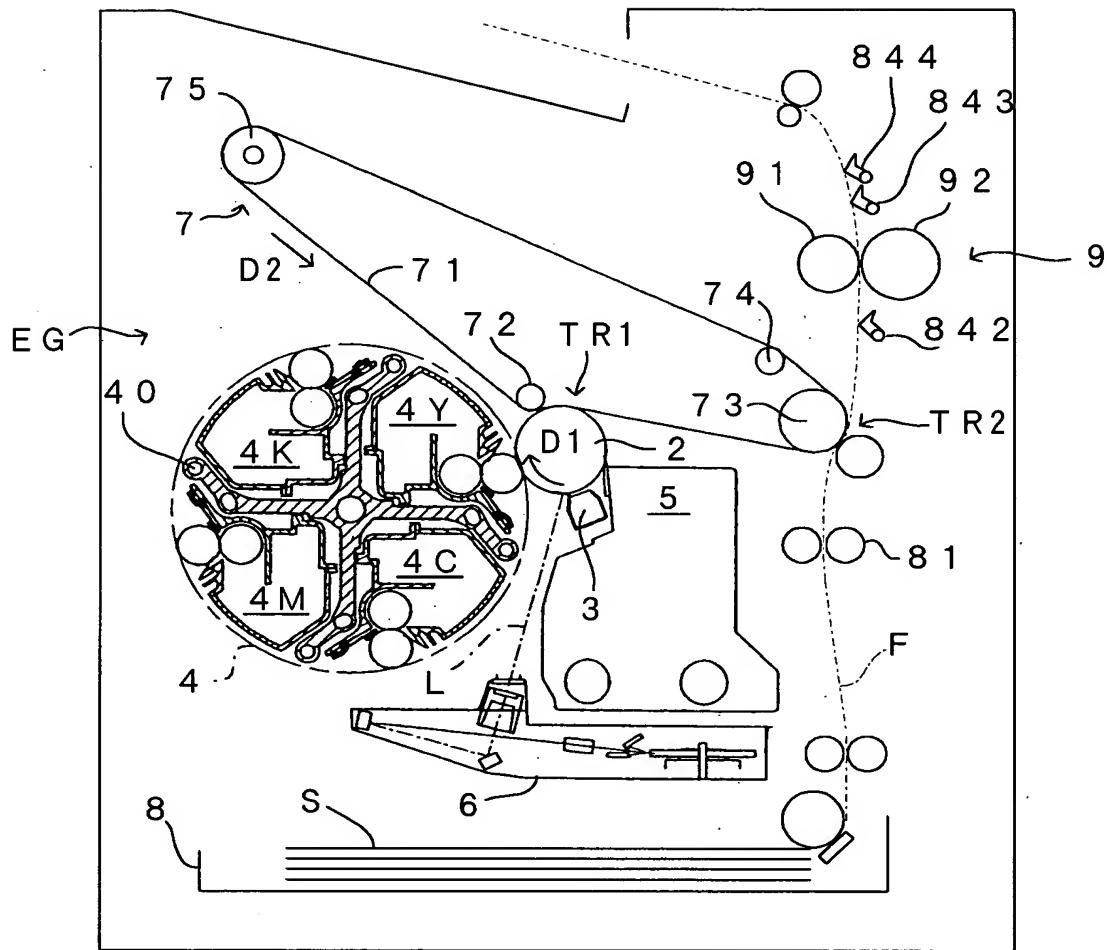


FIG. 9 A

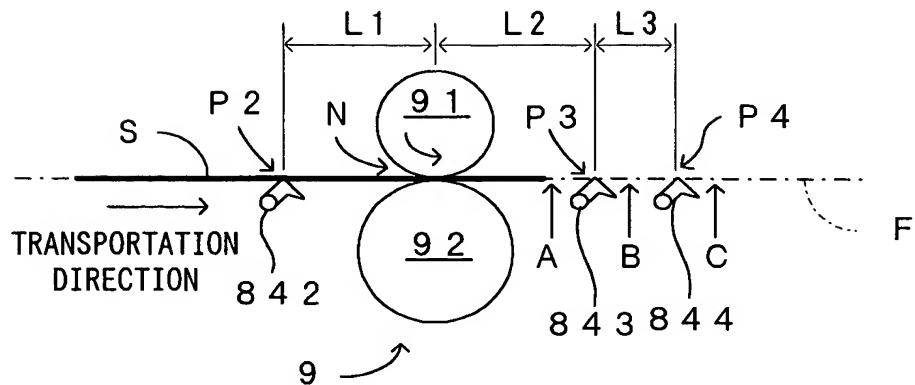


FIG. 9 B

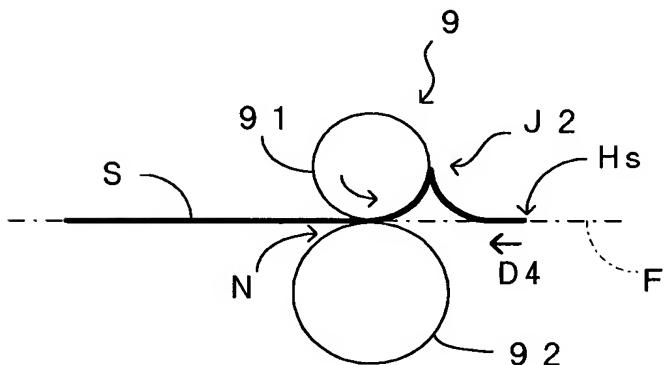


FIG. 10 A

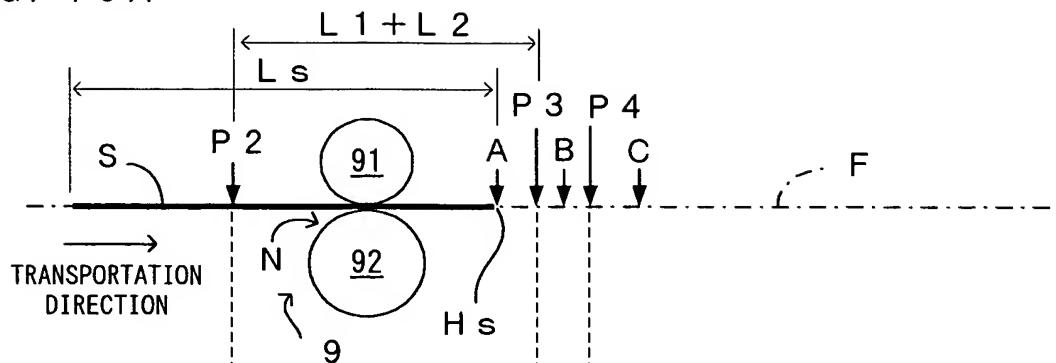


FIG. 10 B

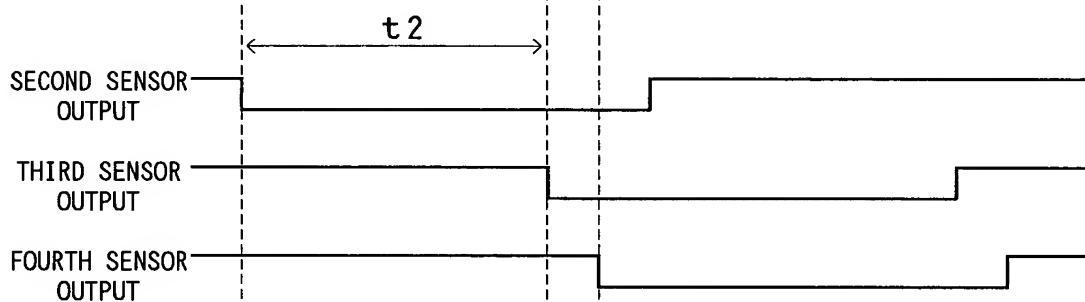


FIG. 10 C

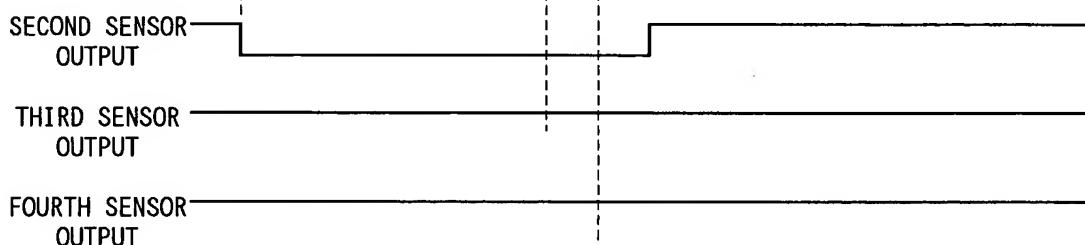


FIG. 11 A

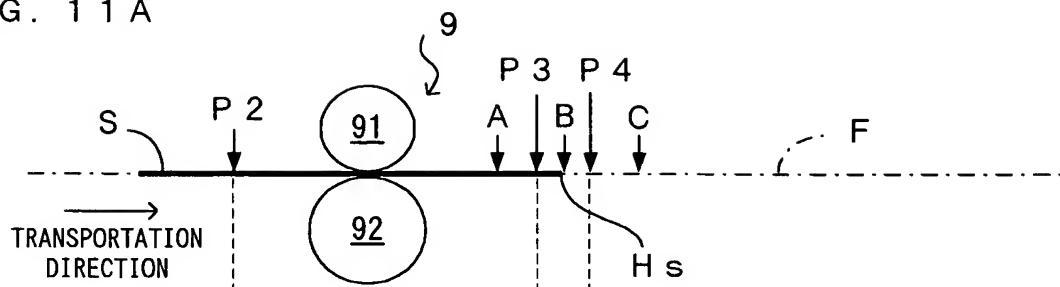


FIG. 11 B

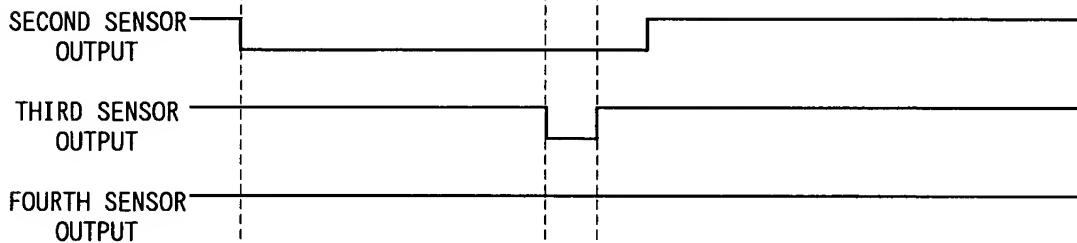


FIG. 11 C

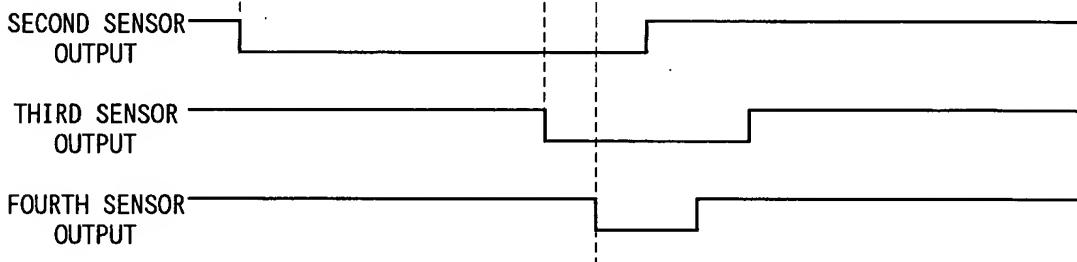


FIG. 12 A

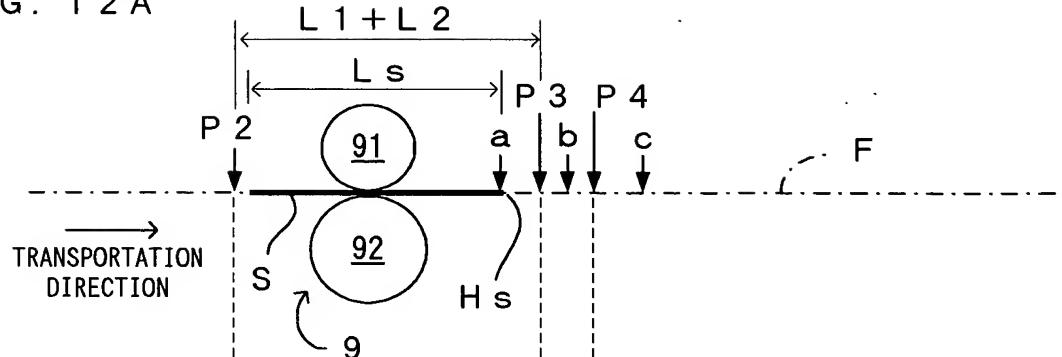


FIG. 12 B

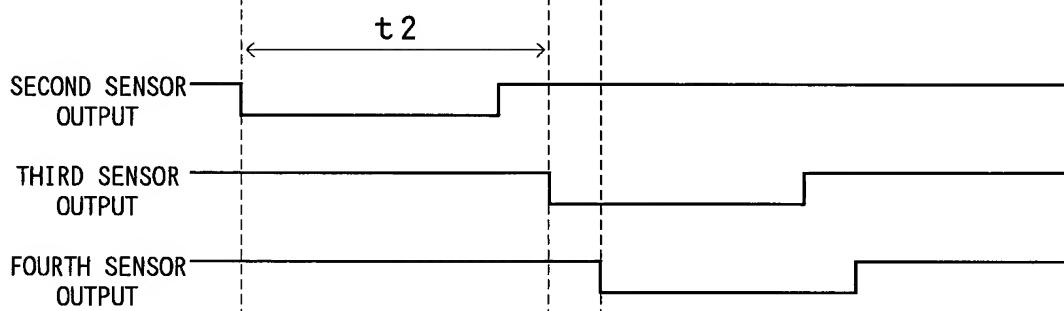


FIG. 12 C

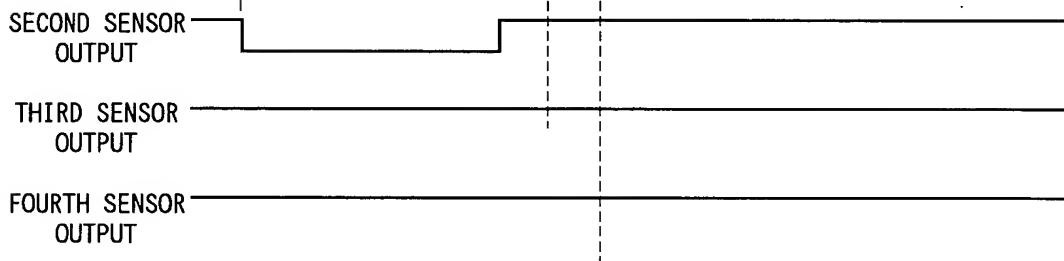


FIG. 13 A

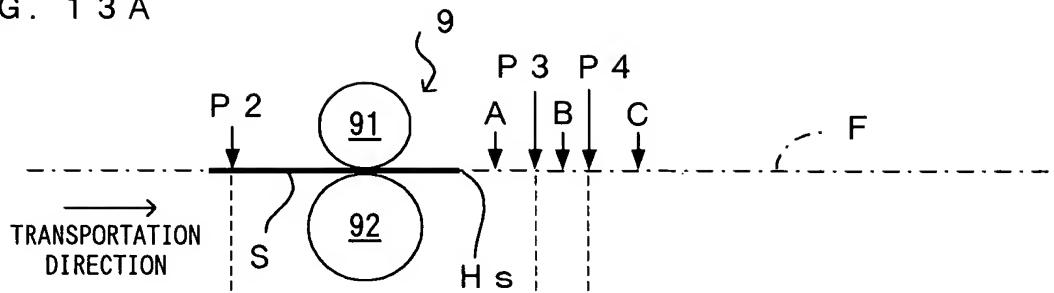


FIG. 13 B

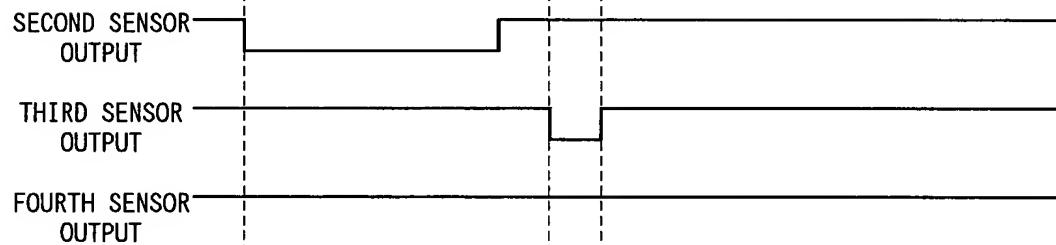


FIG. 13 C

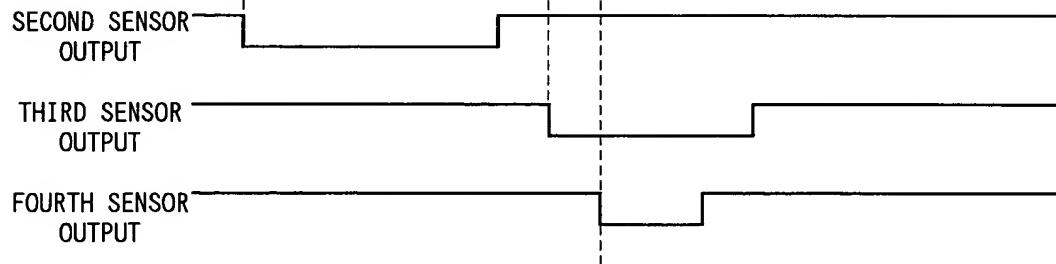


FIG. 14 A

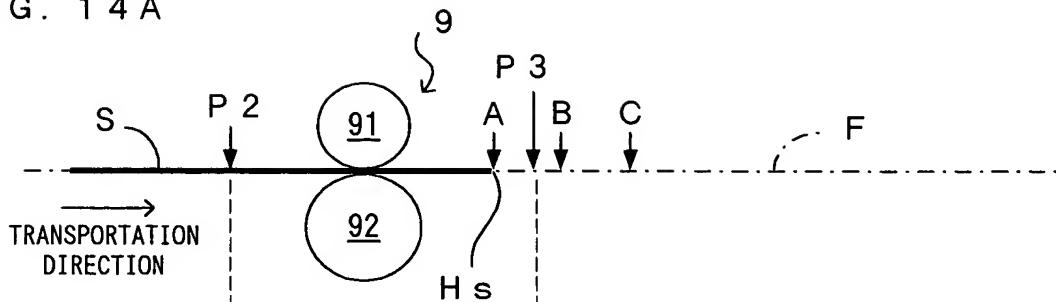


FIG. 14 B

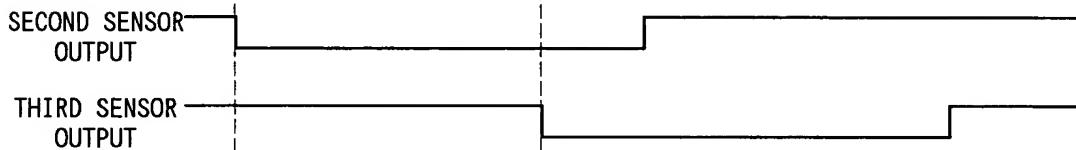


FIG. 14 C

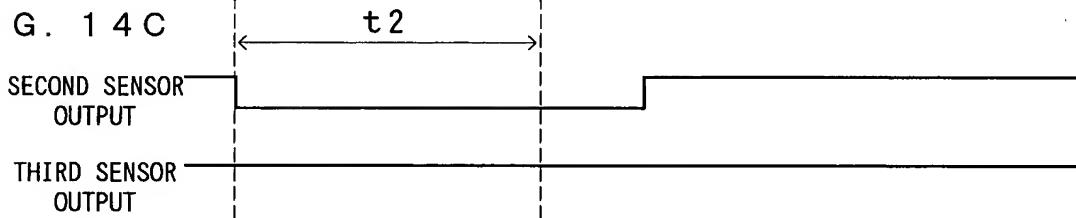


FIG. 14 D

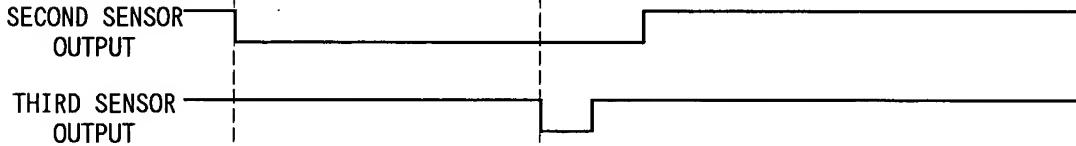


FIG. 14 E

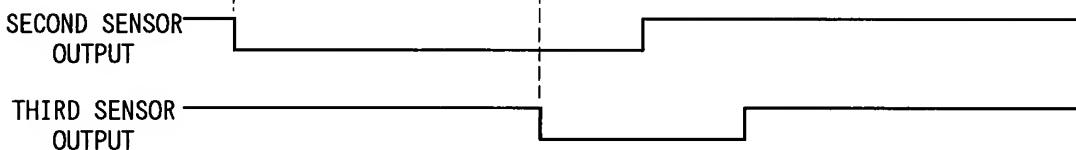


FIG. 15 A

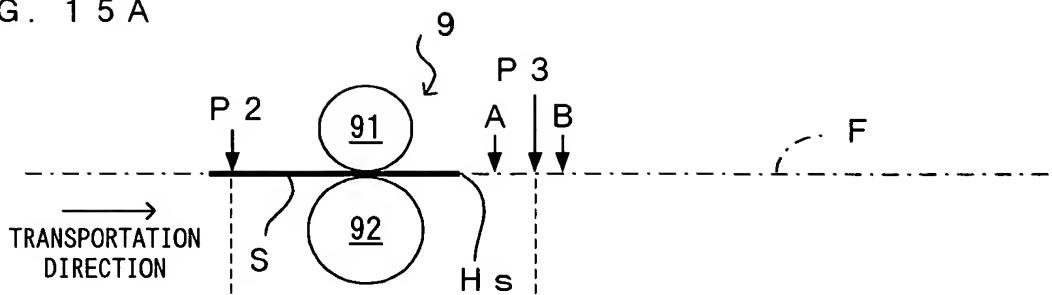


FIG. 15 B

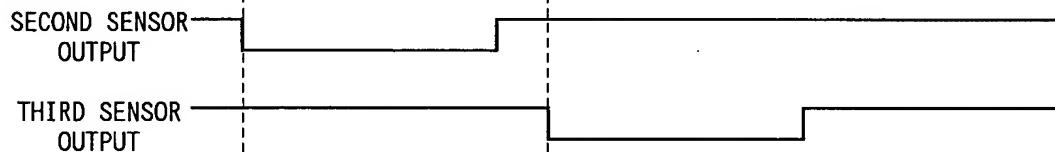


FIG. 15 C

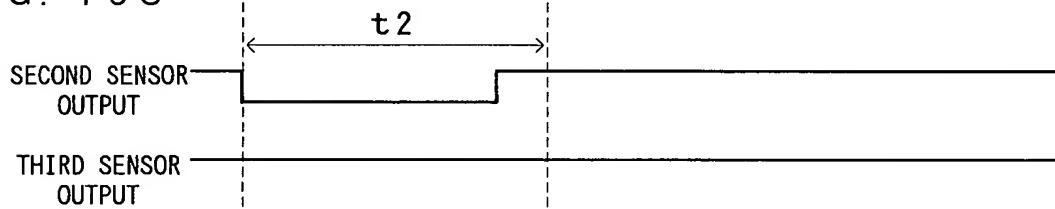


FIG. 15 D

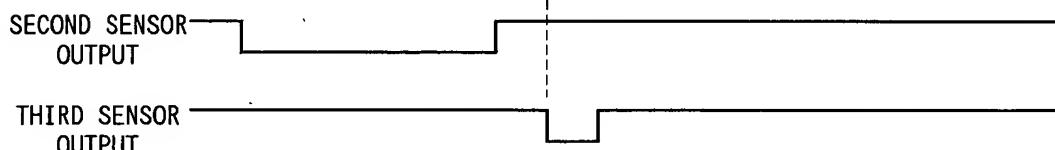


FIG. 16

	CONDITION FOR APPLICATION	SHEET LENGTH	JAM PATTERN	CONDITION 1	CONDITION 2	CONDITION 3	CONDITION 4	JUDGEMENT RESULT
COMPARISON EXAMPLE	SENSORS DISPOSED AT TWO POSITIONS	LONG	A-1 (NORMAL) A-2 A-3 A-4	- - O -	- - O -	- - O -	- - O -	O O O X
	CONDITION 1 + CONDITION 4	SHORT	B-1 (NORMAL) B-2 B-3 B-4	- - - -	- - O -	- - O -	- - O -	O O O X
	SENSORS DISPOSED AT THREE POSITIONS	LONG	A-1 (NORMAL) A-2 A-3 A-4	- - O -	- - O -	- - O -	- - O -	O O O O
PREFERRED EMBODIMENT	CONDITION 1 + CONDITION 2 + CONDITION 3 + CONDITION 4	SHORT	B-1 (NORMAL) B-2 B-3 B-4	- - - -	- - - O	- - - O	- - O -	O O O O

FIG. 17

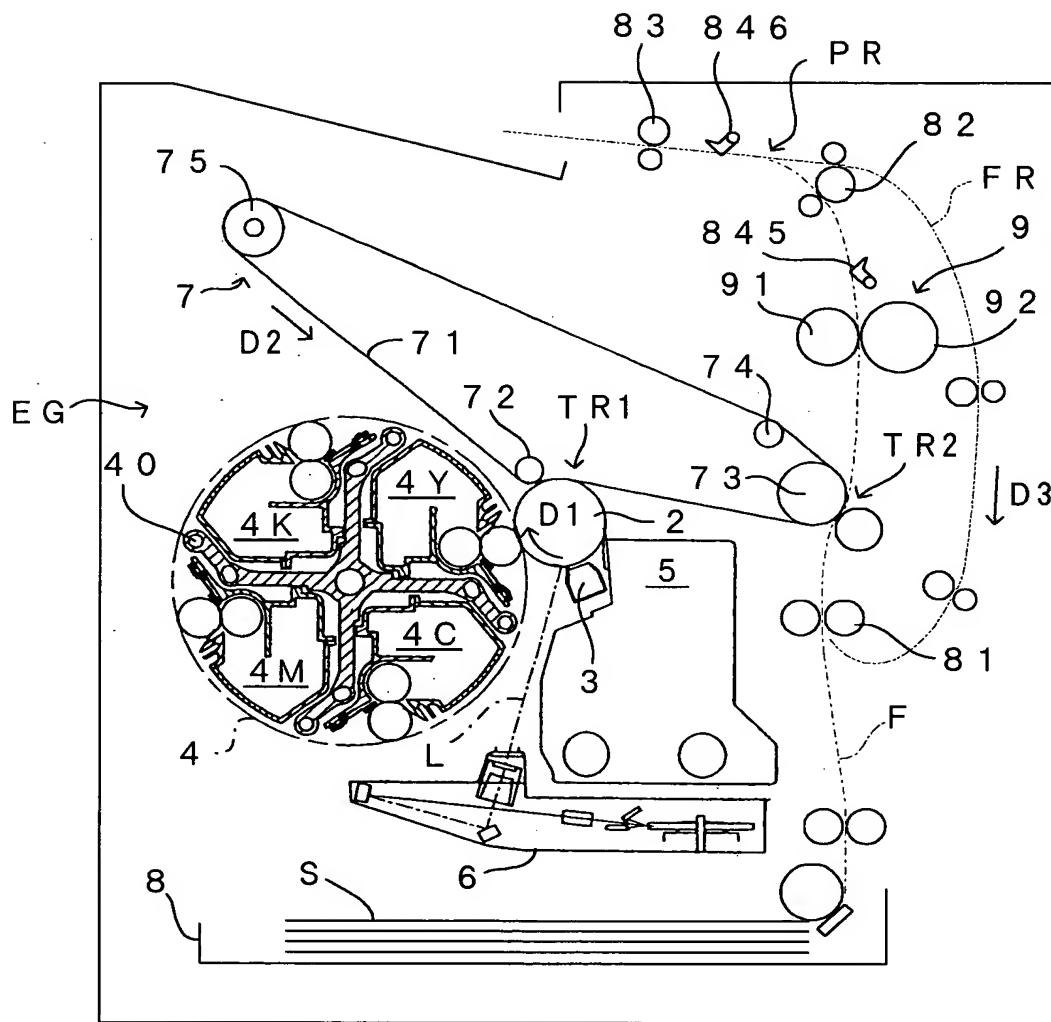


FIG. 18 A

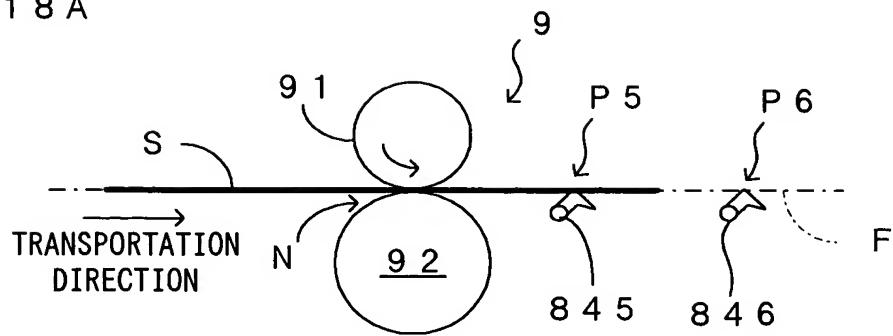


FIG. 18 B

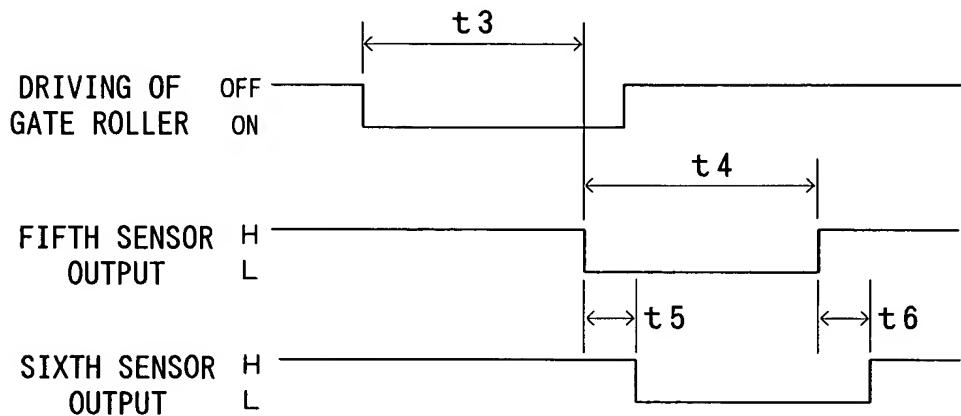
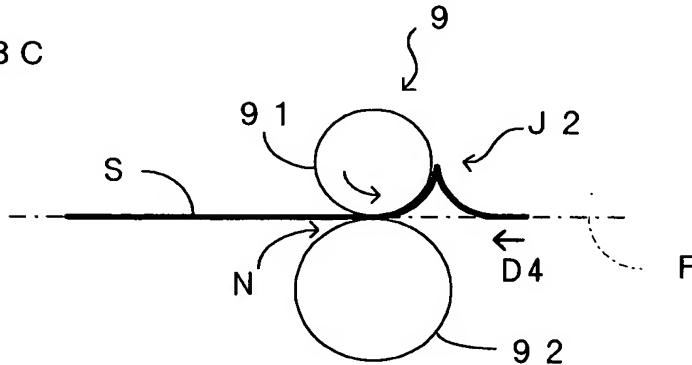
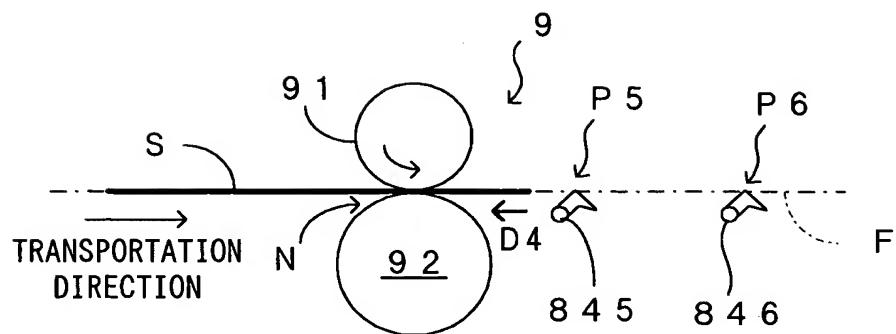


FIG. 18 C



F I G . 1 9 A



F I G . 1 9 B

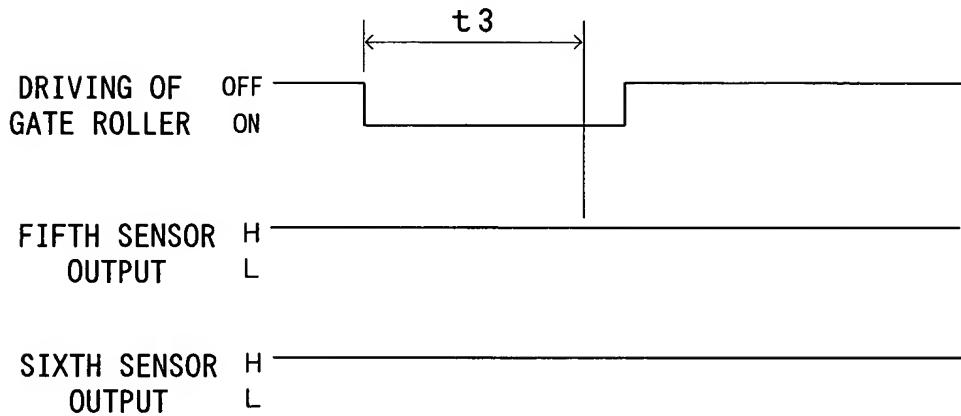


FIG. 20 A

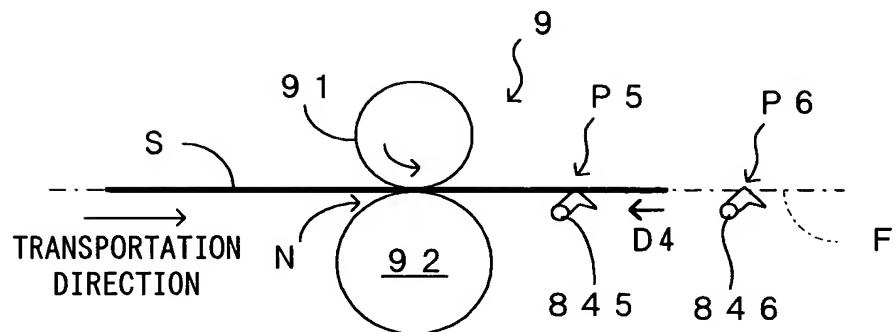


FIG. 20 B

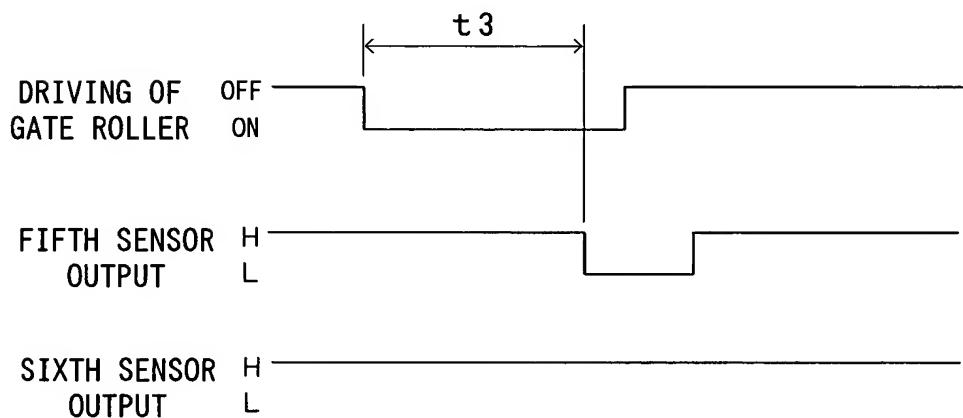


FIG. 21 A

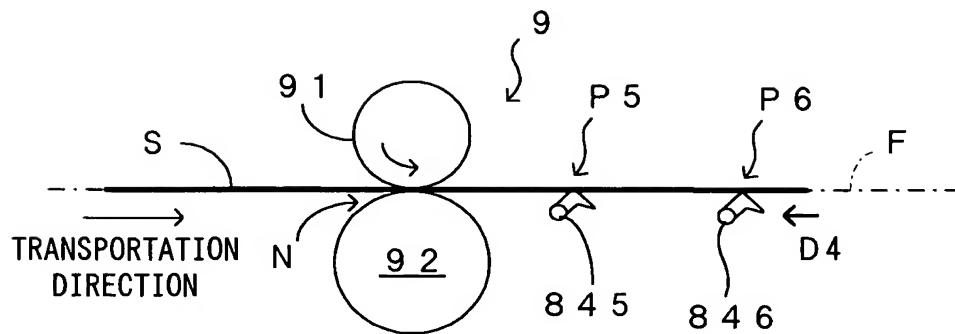


FIG. 21 B

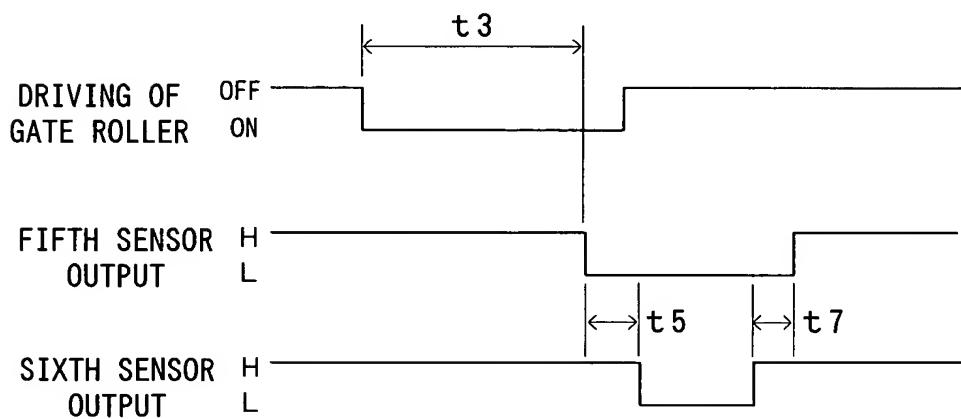


FIG. 22 A

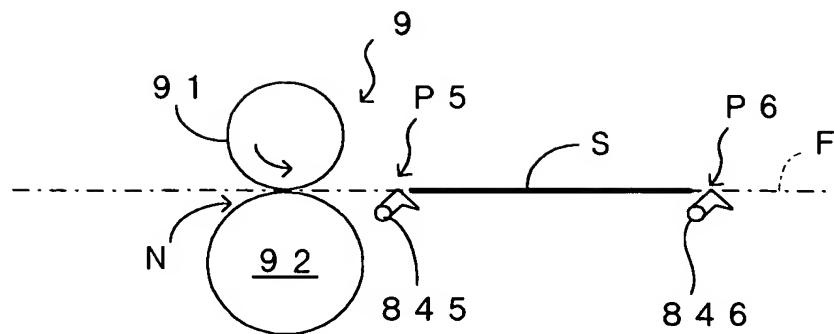


FIG. 22 B

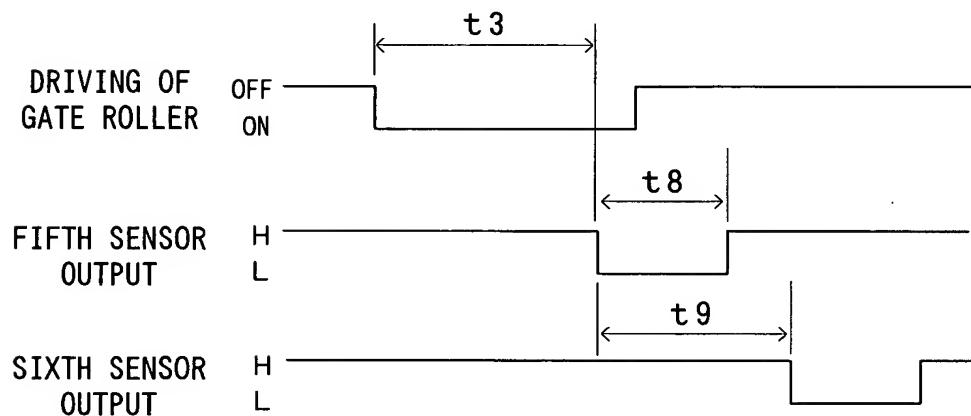


FIG. 22 C

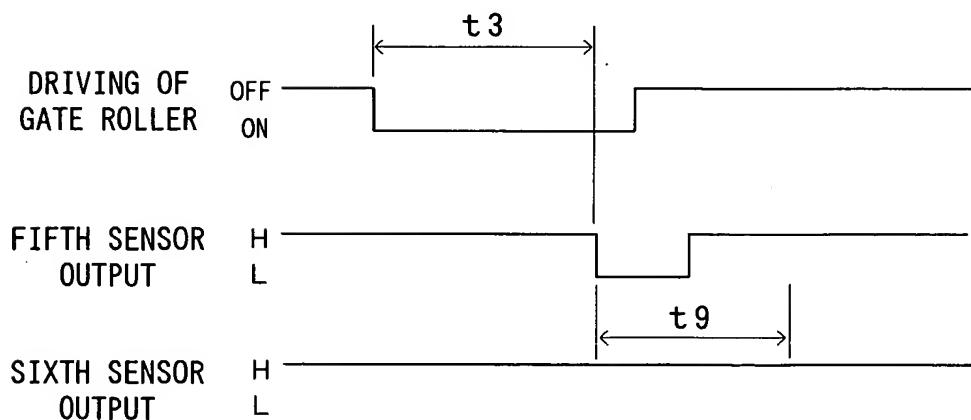


FIG. 23A

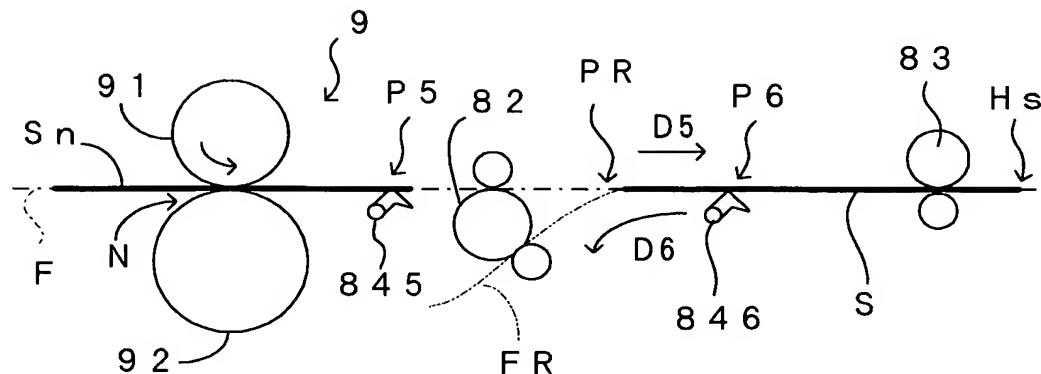


FIG. 23B

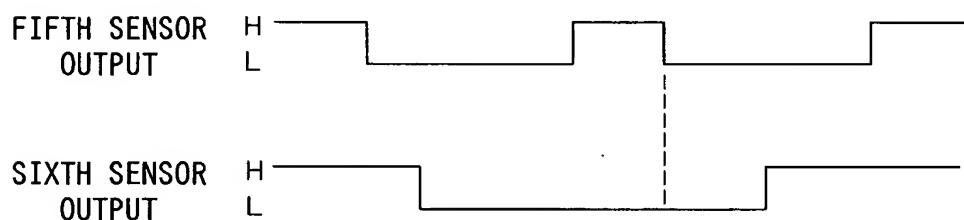


FIG. 23C

